Physical Science Semester 1 Final

Chapter 1 True or False

	An experiment is designed to specifically test the hypothesis. The metric system works on a base 10 making conversion simple.		
	A pie chart show parts of the whole or percentages.		
	4. Recorded observations or measuremen	its are called variables.	
;	5. A balance is used to measure length.		
Multip	ole Choice		
(6. A condition that remains constant duri	ng an experiment is	
	a. control	b. liter	
	c. meter	d. variable	
,	7. The SI unit for length is		
	a. control	b. liter	
	c. meter	d. variable	
8	8. A condition that changes during exper	iments is	
	a. control	b. liter	
	c. meter	d. variable	
(9. The basic SI unit of volume		
	a. gram	b. liter	
	c. meter	d. hypothesis	
	10. An educated guess is a		
	a. gram	b. liter	
	c. meter	d. hypothesis	
	11. The amount of stuff in an object is		
	a. gram	b. data	
	c. mass	d. hypothesis	
	12. The SI unit for mass is		
	a. gram	b. liter	
	c. meter	d. hypothesis	
	12 D-4		
	13. Data expressed with words is	h hymothogia	
	a. data	b. hypothesis	
	c. qualitative	d. quantitative	

 14.	Data expressed with numbers is	
	a. data	b. hypothesis
	c. qualitative	d. quantitative
 15.	765 g = kg	
	a. 7.65	b. 0.765
	c. 7650	d. 765, 000
 16.	$14 L = \underline{\qquad} mL$	1 044
	a. 1.40 c. 140	b. 0.14
	C. 140	d. 14, 000
 17.	2648 cm = km	
	a. 264.8	b. 26.48
	c. 0.2648	d. 0.02648
18.	78 m = cm	
	a. 7.8	b. 0.78
	c. 780	d. 7,800
10	175 mg = g	
 1).	a. 0.175	b. 17.5
	c. 1,750	d. 175, 000
	0. 1,700	a . 175, 000
 20.	$1000 \text{ mL} = \underline{\qquad} \text{ L}$	
	a. 100	b. 10
	c. 1	d. 0.001
21.	Convert 5000 to correct scientific nota	tion.
	a. 500×10^2	b. 5×10^3
	c. 0.5×10^3	d. 0.005×10^2
22	Convert 0.025 to correct scientific nota	ation
 	a. 2.5×10^2	b. 25×10^3
	c. 0.025×10^{-3}	d. 2.5 x 10 ⁻²
	6. 0.020 12 10	4. 2.0 11 10
 23.	Convert 7.9 x 10^{-3} to correct standard r	
	a. 0.79	b. 0.079
	c. 790	d. 7900
24.	. Convert 1.2 x 10 ⁻² to correct standard	l notation.
	a. 0.12	b. 0.012
	c. 120	d. 1200

25	All are important aspects	s of the scienti	fic method EXCEPT	
	a. it is standard		b. it is repeatable	
	c. it is organized		d. it is a secret code for scien	ıtists
Chapter				
True or		ملطمنسمي طننيي		
	=		shape but definite volume.	
			e shape and definite volume	
	·		le shape and variable volume	
	Sodium Chloride (NaCl)	is a mixture.		
30). Silver is an element.			
Multiple	e Choice			
31	Properties that can be o	bserved or me	asured are	
	a. chemical		b. physical	
32	. Properties or changes th	at alter a subs	tance's composition are	
	a. chemical		b. physical	
33	Changes easily manipulat	ed and that do	o not alter a substances compos	sition are
	a. chemical		b. physical	
34	. Changes that are indicat	ed by a gas, a s	solid, heat or light are	
	a. chemical		b. physical	
35	 Bending a copper wire is 	what kind of	change?	
	a. chemical		b. physical	
36	5. Shaving block of ice for s	now cones is v	what kind of change?	
	a. chemical		b. physical	
37	'. Grapes fermenting to wi	ne is what kind	d of change?	
0,	a. chemical	The 10 What Miles	b. physical	
20	B. Melting an ice cube is wl	hat kind of cha	ngo?	
30	a. chemical	iat killu ol cila	b. physical	
39). Adding energy to a liquid			
	a. Solid	b. liquid	c. gas	
40). Adding energy to a solid	creates a		
	a. Solid	b. liquid	c. gas	

41.	A liquid losing energy to its enviro	onment creates a	
	a. Solid b. liqu	id c. gas	
42.	What is the density of a substanc	e with a mass of 360 g and a volume of	40 mL?
	a. 18 g/mL	b. 9 g/mL	
	c. 4 g/mL	d. 2 g/mL	
	-	_	
43. volume o		mL. What is the mass of a block of stee	l with a
volume o	a. 32 g	b. 16 g	
	c. 8 g	d. 2 g	
	c. og	u. 2 g	
44.	The density of tin is approximatel	y 7 g / mL. What is the volume of 3.5 g	of tin?
	a. 2 g	b. 4 g	
	c. 6 g	d. 8 g	
45.		nat has a mass of 60 g and a volume of 1	5 mL?
	a. 2 g	b. 4 g	
	c. 6 g	d. 8 g	
16	Sand is an example of a		
40.	Sand is an example of a	b. element c. mixture	
	a. compound	b. element c. mixture	
47.	Pure water is an example of a		
	a. compound	b. element c. mixture	
	•		
48.	Chicken noodle soup is an examp	le of a	
	a. compound	b. element	
	c. homogeneous mixture	d. heterogeneous mixture	
49.	Soda pop is an example of a		
	a. compound	b. element	
	c. homogeneous mixture	d. heterogeneous mixture	
50	Iron is an example of a		
50.	a. compound	b. element	
	c. homogeneous mixture	d. heterogeneous mixture	
	c. Homogeneous mixture	a. Heterogeneous mixture	
Chapter 3			
True or Fa			
	The atomic mass is the total num	ber of neutrons and protons.	
	The atomic number is the numbe	·	
			
53.	Electrons add to the mass of an e	iement.	

54. Atom means "undivided."	
55. An element always has the san	ne number of neutrons.
Multiple Choice	
56. To gain a full set of electrons, aton	ns can electrons.
a. gain	b. lose
c. both a and b	d. none of the above
57. Cations are charged ions	
a. negatively	b. positively
58. Anions are charged ions	
a. negatively	b. positively
59. The vertical columns of elements of	on the periodic table are called
a. families	b. groups
c. periods	d. both a and b
60. The horizontal rows of elements o	n the periodic table are called
a. families	b. groups
c. periods	d. both a and b
61. A vertical column on the periodic t	able represents
a. elements with the same r	number of valence electrons
b. the number of neutrons in	n the nucleus of an atom
c. the number of energy leve	
d. elements belonging to the	e same region (ex. metals)
62. A horizontal row on the periodic to	· ·
a. elements with the same r	
b. the number of neutrons in	
c. the number of energy leve	
d. elements belonging to the	e same region (ex. metals)
63. Metalloids have properties of	
a. metals	b. nonmetals
c. both metals and nonmeta	d. neither metals and nonmetals
64. The most reactive metals are in Gr	·
a. 1	b. 2
c. 17	d. 18
65. The most reactive nonmetals are in	•
a. 1	b. 2
c. 17	d. 18

6	66. What is the m	nass of 0.5 moles of neon	?	
	a. 5 g		b. 10 g	
	c. 15 g		d. 20 g	
6	57. How many m	oles are in 80 g of calcium	?	
	a. 1 mole	2	b. 2 moles	
	c. 4 mole		d. 6 moles	
6	8. A subatomic	particle found in the nucl	eus with a positive charge is	
	a. electro	on	b. neutron	
	c. protor	1	d. none of the above	
e	69. A subatomic p	particle found in the nucle	eus with no charge is	
	a. electro		b. neutron	
	c. protor	1	d. none of the above	
7	70. A subatomic p	particle found outside the	nucleus with a negative charge is	S
	a. electro		b. neutron	
	c. protor	1	d. none of the above	
7	71. If an atom ha	s an atomic mass of 11 an	nu, and it contains 5 electrons, it	must be
	a. boron		b. carbon	
	c. sodiur	n	d. none of the above	
7	72. The organizat	ion of the periodic table i	s based on	
	a. the nu	ımber of protons in an ato	om	
	b. the m	ass of an atom		
	c. the nu	ımber of neutrons in an a	tom	
7	73. Atoms in grou	ıp 18 are inert because		
	a. they h	ave no valence electrons		
	b. they h	have an even number of v	alence electrons	
	c. they h	ave the outer most energ	y level full	
7	74. Elements four	nd in the middle of the pe	eriodic table are called	
		tion metals	b. halogens	
	c. alkali ı	metals	d. metalloids	
7		s an 11 protons and 11 e		
	a. boron		b. carbon	
	c. sodiur	n	d. none of the above	

Chapter 4

True	or	Fa	lse

True or F	alse		
76.	Ionic bonds transfer electrons.		
77.	Ionic bonds occur between 2 nonmet	als.	
78.	Covalent bonds balance charges.		
79.	Metallic bonds are formed when the	outer most energy level of m	etals overlap.
80.	Bonds are formed with all of an element	ent's electrons.	
Multiple	Choice		
81.	Cations 1 or more elect	rons.	
	a. lose	b. gain	c. maintain
82.	Anions 1 or more elect	rons.	
	a. lose	b. gain	c. maintain
83.	The sum of the ionic charges in a bala	inced ionic compound must e	qual
	 a. the largest ionic charge 	b. its group	
	c. zero	d. a negativ	e number
84.	The correct name for the compound	CaO is	
	a. calcium oxygen		cium monoxide
	c. calcium monoxide	d. calcium o	oxide
85.	The correct name for the compound	N ₂ F ₃ is	
	 a. nitrogen fluoride 	b. dinitrogen triflou	
	c. trinitrogen diflouride	d. nitrogen fluorine	
86.	The correct name for the compound	Li(OH) is	
	 a. lithium oxygen hydrogen 	b. lithium monoxide	
	c. lithium hydroxide	d. monolithium mo	nohydride
87.	The correct formula for carbon tetrac	chloride is	
	a. CCl	b. C ₄ Cl	
	c. CCl ₄	d. C ₄ Cl ₄	
88.	The correct formula for magnesium c	hloride is	
	a. MgCl	b. Mg ₂ Cl	
	c. Mg ₂ Cl ₂	d. MgCl ₂	
89.	The correct formula for sodium iodide	e is	
	a. Nal	b. Na₂I	
	c. Na ₂ I ₂	d. Nal ₂	

90. The ionic charge of elements in group 2 is	
a. +1	b. +2
c2	d1
	-
91. The ionic charge of elements in group 17 is	
a. +1	b. +2
c2	d1
CZ	u1
92. The ionic charge of elements in group 1 is	
a. +1	b. +2
c2	d1
CZ	u1
93. The ionic charge of elements in group 16 is	
a. +1	b. +2
c2	d1
C. Z	u. I
94. The ionic charge of elements in group 13 is	
a. +1	b. +2
c. +3	d. none of the above
95. The ionic charge of elements in group 14 is	
a. +1	b. +2
c. +3	d. none of the above
96. What are two NEW things you learned so far this	year?
97. What are two concepts or facts that we reviewed-	things you already knew?
-	-
98. What is your favorite thing that we've done so far	this year?

100. Do you have some suggestions to improve how we do things in science class? (Please be

99. What is your least favorite thing that we've done so far this year?

constructive- don't just say no notes or no tests. What can we do instead?)